

LAND POLICIES IN THE CANADIAN NORTH

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FROM - SHELL PROGRAM ON THE CANADIAN NORTH

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Land Policies in the Canadian North.

MR. CHAIRMAN, LADIES AND GENTLEMEN

Part of the description of this session asks what effects has resource development in the North had on recent government views of the strategic significance of the North and on their land use policies in the North. I cannot deal with strategic significance unless it is meant in the context of the strategy of development. Military strategy is a field in which I am not expert.

Perhaps it would be useful if we discussed the meaning of the term "resources" as it is used in this case. Let me say before I go any further that I am not suggesting that the "North" is limited to the Northwest Territories and the Yukon. In my speech I deal only with those territories and my comments are limited to them.

Taken together, these two political entities have an area of almost one and a half million square miles and a population of less than 50,000. This means a density of population of 3 persons per 100 square miles. Yellowknife, Whitehorse, Hay River, Fort Smith, Frobisher, Inuvik and Pine Point are the only settlements having more than 1,000. You can see how great an area, how small a population, and how scattered that population is. Yet the North includes 40% of the Canadian Pre-Cambrian Shield and 30% of the Canadian cordillera region. The Yukon and southern Mackenzie District have 77,000 square miles of productive forest containing an estimated 23 billion cubic feet of merchantable timber.

Mineral production in the two territories was \$153 million in 1969. It included asbestos, silver, lead-zinc, gold and copper. In 1970 it can now be estimated that production will be \$203 million.

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Everyone who looks at the North nowadays is concerned about oil potential and the prospect of finding oil on the scale of Prudhoe Bay in Alaska. It has been estimated that the North could have reserves of 60 billion barrels of oil and 350 trillion cubic feet of natural gas. That would be six times Canada's present proven reserves.

What would finds of oil on such a scale mean to Canadians and what would it mean to northerners?

The bulk of northern riches lie beneath the ground in the form of minerals - precious, semi-precious, metallic, liquid or gas. The area in which this wealth is hidden is vast --- much larger than most of us realize. The difficulties of converting this potential into reality are great --- much greater than most of us realize. On the other hand, the rewards may be immense --- again much more so than most of us realize.

All of us are aware of the oil field at Prudhoe Bay. It has been estimated to contain between five and ten thousand million barrels of oil. Ten thousand million is a number beyond my ability to comprehend.

The value is also beyond comprehension. Let me illustrate it by pointing out one aspect of the discovery. The British Petroleum Company --- half owned by the British Government --- was a participant in the field. Their interest was situated between the two exploring companies' wells. When their discoveries had been given their preliminary evaluation, B.P. had not yet put a drill into the ground. On the basis of what was then known, they were able to use their interest in the field to purchase assets in the United States without having to put up any cash. They pledged production and an interest in the field to buy assets valued at more than the entire foreign exchange reserve of the British Government.

That one company's share of that one field is worth more than all the foreign exchange held by the British Government to finance the transaction of the Sterling bloc of countries.

That dramatic fact illustrates the potential for Canada. Now you will be asking, "Where do we stand in seeking this wealth?"

Again, let me provide some comparisons to make the situation clear. In Alberta, there are about 240,000 square miles of potential oil-bearing sedimentary rocks. In finding the oil that is now known to exist in that province, many wells were drilled. One in every 20 found oil or gas in commercial quantities. In the Northwest Territories, there are 657,000 square miles of sedimentary basin to be explored. Two and one half times the Alberta area. In the Arctic Islands, at this time, there has been only one exploratory well drilled for every 40,000 square miles of sedimentary area. On the mainland in the Territories, there has been one well for every 23 square miles.

You can calculate the odds. Where one well in 23 square miles found oil, one out of 20 times --- what would you expect from one well in 40,000 square miles? Between 1921 and now, 450 wells were drilled. It has been estimated that 655 wells will be drilled between now and 1974. No, the prospect cannot yet be evaluated. The stock market may go up and down many times before we can know what is to be known. The market, after all, reflects a speculative view of pretty short term prospects --- and in this day of extremely high interest rates, a short term is short indeed. Time may be an important factor in evaluating those of a country.

Consider the potential on the basis of what has been found in other sedimentary basins which have been well explored. On that basis, it is reasonable

to suggest that our northland could be the source of 55,825 million barrels. That could be 5 to 10 times the oil in the Prudhoe Bay field.

On that basis, Canada could gain immeasurably, in terms of total national wealth. Remember that the Canadian people, through the government holdings in Panarctic, is a direct investor in the search. Remember that whatever company has rights in the eventual find, the oil will be Canadian oil and Canada's foreign exchange holdings - Canada's national wealth will be vastly enhanced.

This will make an immense difference to every Canadian. It will enlarge the freedom of the Canadian Government. Many of you will remember the crises in foreign exchange which have inhibited governments in the past. Many of you will be aware of the constraints which a weak exchange balance can impose on any national government. The potential of the North -- and the potential is not limited to oil and gas -- could free us from the spectre of such a crisis in the foreseeable future, making it possible for our government to be much more aggressive and effective in meeting the needs of Canadians everywhere.

Obviously such a potential must affect government strategy for development and for land use policies. Equally obviously, we must recognize the interaction between such discoveries and the environment. Indeed, even the search for this potential affects the environment.

The Government has recognized that it is necessary that terms and conditions be imposed upon resource prospectors and developers to ensure that work is carried out in a manner such that any detrimental effects upon the environment are kept to an absolute minimum. These terms and conditions will vary depending upon the sensitivity of the area involved, and can include, for example, restrictions on the time of year when work can be carried out, the type of

equipment that may be used, the type and extent of work that may be done, how waste products shall be disposed of, and what clean-up work must be done after the work has been completed.

During the past year, the federal government has taken positive legislative action in the interests of safeguarding the quality of the lands and waters north of 60. This legislation consists of two new Acts and amendments to an existing Act. The amendments were to the Territorial Lands Act and the two new Acts are the Arctic Waters Pollution Prevention Act and the Northern Inland Waters Act.

I will not go into details of these pieces of legislation but I do want to stress some aspects of each.

The Arctic Waters Pollution Prevention Act has a preamble which reads:

"Whereas Parliament recognizes that recent developments in relations to the exploitation of the natural resources of arctic areas, including the natural resources of the Canadian Arctic, and the transportation of these resources to the markets of the world are of potentially great significance to international trade and commerce and to the economy of Canada in particular;

And whereas Parliament at the same time recognizes and is determined to fulfil its obligation to see that the natural resources of the Canadian Arctic are developed and exploited and the arctic waters adjacent to the mainland and islands of the Canadian Arctic are navigated only in a manner that takes cognizance of Canada's responsibility for the welfare of the Eskimo and other inhabitants of the Canadian Arctic and the preservation of the peculiar ecological balance that now exists in the water, ice and land areas of the Canadian Arctic;

Now therefore, Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:"

A most significant preamble.

This piece of legislation is called "An Act to Prevent Pollution of Areas of the Arctic Waters Adjacent to the Mainland and Islands of the Canadian Arctic." It provides for action by the Governor in Council and for the making of regulations concerning the deposition of wastes by persons or ships, that the owners and of cargoes are both respectively liable for any polluting of the environment, that persons and ships carrying out activities must show financial responsibility, that there shall be shipping safety control zones and certain requirements before ships can enter such zones. Penalties can be up to \$100,000 for a ship and up to \$5,000 for a person but in the case of a person each day that an offence is committed is considered as a separate offence. In addition to the fine referred to, a ship may be forfeited to the Canadian Government if a Court so orders.

While these are severe penalties, I should stress that the first objective of the Act is the prevention of pollution.

The Northern Inland Waters Act is designed to provide for the comprehensive, multi-purpose development and conservation of the water resources of the Yukon Territory and Northwest Territories. The Act provides for basin-wide planning for comprehensive water development and utilization, for the licensing of all water development undertakings, the imposing of the responsibilities for water quality maintenance or restoration on the users of the resource, and the provision for charging water fees in accordance with the quantity used and the type of use being made of the resource. Again, the main theme of the legislation is wise use of the resource and the prevention of pollution. And the responsibility of keeping the water pure is placed squarely on the user by way of saying to him, in effect, "Keep it clean, or we'll cut your water off."

The amendments to the Territorial Lands Act firstly provide for the making of regulations respecting the protection, control and use of the surface of all

territorial lands. The restrictions and conditions imposed under this authority will apply throughout the Yukon Territory and the Northwest Territories.

In addition to the general regulations referred to above, provision is made for the setting aside of "land management zones" and for the making of regulations that will specifically apply in the said land management zones. Not only will there be special terms and conditions generally, but in addition a permit will be required for each land use operation in a land management zone and the specific terms and conditions of each permit will vary according to the particular type of land use operation that is to be carried out.

The Land Use Regulations are in the final stages of drafting, and after a final review with the Councils of each of the Territories, they will appear in the Canada Gazette for a period of approximately six weeks. This is to give ample opportunity for individuals and agencies or companies to comment and criticize the proposed regulations before they are officially put into effect. It is possible that the Regulations as gazetted could be amended as a result of the comments and criticisms.

What I have said so far gives you the ground work and background of what might be called "the terms of reference" within which the Federal Government is working in its efforts to ensure that resource development in the North shall be done in such a manner that the environment will be adequately protected for future generations.

Resource extraction requires transport facilities.

We have all been told that oil or gas lines would devastate the northern ecology. There have been stories about this, and they have created a great deal of fear. The answers to such problems lie in research. It isn't sensible to raise great fears when research is going on to determine the real situation. There is a 2,000 foot loop of 48 inch pipe at Inuvik to test some of the theories

which have been advanced. There are a number of possibilities and their effectiveness can only be guessed at. In Alaska, there is a test going forward to see if a line laid over a bed of gravel and covered with gravel will overcome the danger of melting permafrost. There are other possibilities. The Russians have built a line above ground raised on stilts, for example.

There are some points you should keep in mind in judging the possibilities. First - no sensible, responsible engineer is going to recommend a pipeline which will sink into an endlessly enlarging bog of melted permafrost. Second - no oil company, or other investor, would invest in such a line. Third - no government would permit it to be built. Fourth - there are several economic solutions to the engineering problems and one of them will be selected, or the line won't be built.

You will have been told that a line above ground will alter the migration routes of the caribou. This, you will be given to understand, will lead to starvation for many Eskimos.

The fact is that no line is going to be built without government approval. The recently announced pipeline guidelines make that abundantly clear. Any line is to be built within a designated pipeline corridor. I quote from the guidelines: "Any certificate issued will be strictly conditioned in respect of preservation of the ecology and environment, prevention of pollution, prevention of thermal and other erosion, freedom of navigation and the protection of the rights of northern residents."

The caribou do not cross the Mackenzie. The only part of the corridor which could affect caribou, is that part of the line connecting Prudhoe with the Mackenzie. There is ample reason to believe that a route and a method of construction can be found which will not affect the caribou which migrate through this area. Research on this is going ahead in Alaska and in Canada. Let us see

of this research before pre-judging the line.

What else is being done? Our ALUR Program (Arctic Land Use Research) is continuing. Last summer this mission-oriented program investigated vegetative regeneration under Arctic conditions, seismic line disturbances, water quality problems associated with mining in extreme climates, effects of oil spills on arctic tundra, fire damage on caribou range, downstream effects of major storage or diversion in terms of channel morphology, and so on.

And while the Land Use Regulations are not yet in effect, we are requiring oil and gas exploration companies to operate under approximately the same terms and conditions that they would have to comply with if the Regulations were in effect. This has been done with regard to operations on Banks Island, in the Mackenzie River Delta area and in the Old Crow area. I would not suggest that we are operating perfectly but I would say that with the co-operation of the oil companies we are having the opportunity of what really amounts to a trial run of the Land Use Regulations before they legally come into effect. To date, the results of these trials indicate that our Land Use Regulations will be very effective and we are most hopeful that time will prove that these early indications are indeed correct.

I could continue on to discuss other land use policies in the North --- such subjects as land disposal policies, the international biological program, the possibility of new national parks in the North, the need for setting aside lands for recreation purposes, oil and gas pipelines in the North, road construction in the North --- but these are subject perhaps best left for another day. I felt you really wished me to talk about the Federal Government's policies on the protection of the environment and that is what I have tried to do. I hope I have been helpful.

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